REMARKS

Claims 1-6 and 8 are pending in this application. Claims 4 and 5 are canceled without prejudice or disclaimer, claims 1 and 6 are amended herein. Upon entry of this amendment, claims 1-3, 6 and 8 will be pending. Entry of this amendment and reconsideration of the rejections are respectfully requested.

No new matter has been introduced by this Amendment. Support for the amendments to the claims is as follows:

Claims 1-6 and 8 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. (Office action paragraph no. 6)

The rejection of claims 1-6 and 8 is respectfully traversed, and reconsideration is requested.

The Examiner cites the limitation "substrate having solar radiation reflectance of 55.3% or less and visible light reflectance of 10% or more to 53.4% or less." The numerical limitations of "55.3% or less" and "53.4% or less" were added in the amendment of July 2, 2009. Applicant had indicated support for these limitations at page 23, line 20, in Table I, and at page 23, line 11, of the specification. However, the Examiner states that:

> "The amended limitations (i.e., the specific property values), that Applicant asserts are supported on Page 23 and in Table 1, are only taught together in one single example, and that particular example is a comparative example, and not any of the inventive examples."

In traversing the rejection, Applicant points out that the specification at page 22, lines 13-22, states:

> "Here, optical measurement in **each Example and Comparative Example** given below is made according to JIS S 3107 (light source: D65). **As the substrate, an Al vacuum-deposited semitransparent PET film** (EMI-1Q, available from MIRAREED Corporation; PET film thickness: 25μm) was used, where the visible light absorbing ink was coated on one side or both sides of the PET film and also this was stuck to a 3 mm thick transparent float glass sheet to make optical measurement." (emphasis added)

and the specification at page 25, lines 9-11, regarding Example 1 states: "As a substrate therefore, the above Al vacuum-deposited semitransparent PET film given as Comparative Example was used." That is, the heat ray reflection substrate used in each Example is the same film as the Al vacuum-deposited semi-transparent PET film of the Comparative Example.

In the laminate constituted of the heat ray reflection substrate and the visible light absorbing film in each Example, it is practically impossible to measure a "visible light reflectance" and a "solar radiation reflectance" of the heat ray reflection substrate itself in a state without the presence of the visible light absorbing film, because the laminate comprises the visible light absorbing film. As such, it is simply the case that the Al vacuum-deposited semitransparent PET film (i.e., heat ray reflection substrate) before provision of a visible light absorbing film, is regarded as the Comparative Example, and the Al vacuum-deposited semitransparent PET film (i.e., heat ray reflection substrate) according to this Comparative Example is subjected to measurement of a "visible light reflectance" and a "solar radiation reflectance", to thereby define the "visible light reflectance" and "solar radiation reflectance" of the heat ray reflection substrate used in each Example, respectively.

Thus, although the measured values of "visible light reflectance of 53.4%" and "solar radiation reflectance of 55.3%" are listed in Table 1 as data of the Comparative Example, these measured values are also the same as those of the "visible light reflectance" and "solar radiation reflectance" of a heat ray reflection substrate in each Example. Therefore, the cited description on page 23 of the specification **does provide support for this portion of the present invention**, and the present claims are fully supported by the specification.

Claims 1-6 and 8 are rejected under 35 U.S.C. §103(a) as being unpatentable over the U.S. Patent of Lin (5,275,869) in view of the U.S. Patent Applicant Publication of Miyabayashi (2001/0009933). (Office action paragraph no. 8)

The rejection of claims 4 and 5 is moot in view of the cancellation of these claims without prejudice or disclaimer. Reconsideration of the rejection of claims 1-3, 6 and 8 is respectfully requested in view of the amendments to the claims. Specifically:

In claim 1, "consisting essentially of" is amended to "consisting of."

In claim 1, the "heat ray reflection substrate" is recited to comprise: "a semitransparent polyethylene terephthalate film having a surface which is uniformly vacuum-deposited with an aluminum thin film without any crevices; or a composite comprising the semitransparent polyethylene terephthalate film having a surface which is uniformly vacuum-deposited with an aluminum thin film without any crevices, and a glass plate." Support for this recitation may be found

in the "Al vacuum-deposited semitransparent PET film" disclosed at page 22, lines 15-18, used in the Examples in the specification.

Titanium black, a dark-colored azo pigment, a perylene black pigment, and an aniline black pigment have been deleted as possible fine particles for the ink in Claim 1.

Regarding Lin '869

Lin '869 describes at column 1, line 67, to column 2, line 4 that:

> "It is one object of the present invention to provide a heat ray reflecting glass which has a high monodirectional reflection, high heat insulation and high luminosity with a reflecting rate and a transparency rate as high as 84% and 65%, respectively, and which can be optionally adjusted depending upon various uses."

That is, Lin '869 has an object of obtaining a heat ray reflecting glass which has a reflecting rate and a transparency rate as high as 84% and 65%, respectively.

To attain this object, the heat ray reflecting glass of Lin '869 has a structure constituted of: a plate glass substrate 1; a metal or metallic oxide coating layer 2 formed in a net configuration composed of solid circle or hexagon patterns, on a surface of the plate glass substrate 1; a printing ink coating 21 provided on the metal or metallic oxide coating layer 2; and an adhesive layer 3 for filling up to the plate glass substrate 1; and the structure has crevices 3' filled with the adhesive layer 3 where the metal or metallic oxide coating layer 2 and the printing ink coating 21 are not present, as shown in FIG. 6 of Lin '869.

It appears that, upon irradiation of light to the heat ray reflecting glass of Lin '869, most of the light is reflected by functions of the metal or metallic oxide coating layer 2 and the printing ink coating 21 provided thereon to thereby attain a reflecting rate as high as about 84%, and part of the light passing through the crevices 3' is transmitted through the heat ray reflecting glass to thereby attain a transmittance or transparency rate as high as about 65%.

That is, to obtain a reflecting rate and a transparency rate as high as 84% and 65%, respectively, Lin '869 has adopted a technique to provide "metal or metallic oxide coating layer 2" accompanied by the crevices 3'. (When the heat ray reflecting glass is so constructed as to have a high reflection, its transmittance necessarily lowers. Thus, it appears that a high transmittance could be obtained by forming the above crevices 3').

By contrast, in case of the laminate constituted of the heat ray reflection substrate and the visible light absorbing film according to the present invention, there has been adopted a technique to obtain a required transmittance, without providing the crevices 3' which are essential to Lin '869. Namely, in case of the Al vacuum-deposited semitransparent PET film of the present invention (i.e., the specific example of the heat ray reflection substrate used in each Example), there is adopted a technique to restrict a visible light reflectance of the substrate down to about 53.4% (incident on a glass surface of Comparative Example) and a solar radiation reflectance thereof down to about 55.3% (incident on a film surface of Comparative Example), thereby obtaining a visible light transmittance of about 19.2% (incident on a film surface of Comparative Example) and a solar-radiation transmittance of about 15.5% (incident on a film surface of Comparative Example) which

are demanded for the heat ray reflection substrate, as listed in Table 1 and described at line 11 and line 20 on page 23 of the specification.

That is, in case of the laminate according to the present invention, there is adopted a technique not to provide the above-mentioned crevices 3' which are essential to the heat ray reflecting glass of Lin '869, but to adjust the thickness of the aluminum thin film uniformly vacuum-deposited without any crevices to thereby obtain a predetermined transmittance demanded for the heat ray reflection substrate. Claim 1 has been amended to recite that the aluminum film is deposited "without any crevices."

The heat ray reflecting glass of Lin '869 is therefore different in structure from that of claim 1, and due to the differences in manufacture technique in Lin '869 and the present invention, Lin '869 cannot have the structure of the present invention.

Regarding Miyabayashi (U.S. Patent Publ. 2001/0009933)

The Examiner states that Miyabayashi does not specifically provide that the particles will absorb visible-region light and transmit near-infrared-region light, but that Miyabayashi contains the same species particles as that claimed and that it will have the claimed characteristics (page 6, lines 4-8, of the Office action).

The colorant of Miyabayashi does have an "ultraviolet absorbing capacity" (see abstract). However, no description is found in Miyabayashi indicating that the colorant of Miyabayashi has a property "to absorb visible-region light and transmit near-infrared-region light and infrared-region

light." Therefore, there is no disclosure of "fine particles contained in the visible light absorbing ink, which fine particles absorb visible-region light and transmit near-infrared-region light and infrared-region light" as recited in Claim 1.

Claim 1 has been amended to delete titanium black, a dark-colored azo pigment, a perylene black pigment, and an aniline black pigment as possible fine particles for the ink in Claim 1. Miyabayashi does not disclose the recited fine particles for the ink in amended claim 1. Paragraphs [0115] to [0119] of Miyabayashi '933 enumerate examples of its colorant, and do not describe, "at least one fine particles of a compound oxide selected from the group consisting of Cu-Fe-Mn, Cu-Cr, Cu-Cr-Mn, Cu-Cr-Mn-Ni, Cu-Cr-Fe and Co-Cr-Fe, titanium nitride, and titanium oxynitride" as recited in amended claim 1.

Thus, Miyabayashi does not describe or suggest an "ink composition" using a colorant that is one of the fine particles recited in claim 1.

Conclusion

(1) As discussed above, the heat ray reflecting glass of Lin '869 and the laminate of the present invention are different from each other in structure, and because the technique to obtain a predetermined transmittance is different than that of the present invention, Lin's device cannot have the structure of the present invention.

(2) Further, Miyabayashi (2001/0009933) does not disclose or suggest a "visible light absorbing ink" as recited amended Claim 1.

Therefore, the laminate constituted of the "heat ray reflection substrate" and the "visible light absorbing film" as recited in amended Claim 1 cannot be achieved by combining Lin '869 concerning the heat ray reflecting glass with Miyabayashi '933 concerning the ink composition suitable for ink jet recording. The pending claims are not obvious over the cited references, taken separately or in combination.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosure: Petition for Extension of Time

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